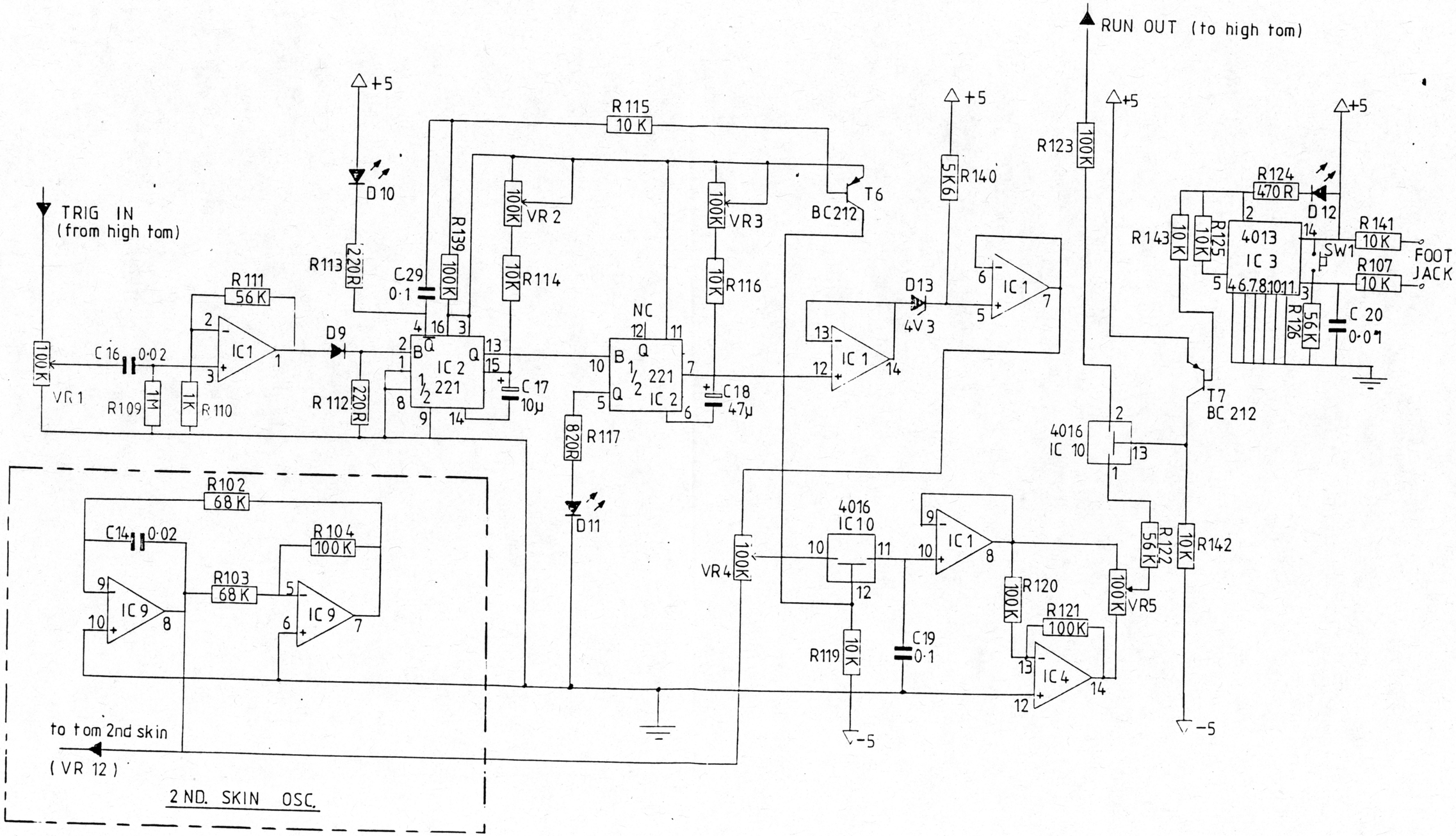
SIMMONS ELECTRONICS LTD, ST. ALBANS, HERTS.

S.D.S. 800 / 400 RUN GENERATOR



S.D.S. 800/400/200 SNARE AND TOM VOICE

NOISE GEN

+15
56K on SDS 200
R 101 100K
C13 1µ
T5 2N5172
C40 220µ
R100 R157 2K2
100K
RV 10 2M2
+5
IC8 LM 301
-5
e

SEQ IN
R1 150K
R5 100K
D8 D7 D3
10K R37
150K R36
PAD IN
BC 182 T3
T4 BC 182
R158 2M7
D2
VR9 100K
C1 0·02
IC 5
R3 10K
R4 3K9
D1
C2 0·02
a b
c
D4
C3 1µ
D5
R6 270K
470K R7
(snare 10K)
VR 15 1M
D6
R14 470R
R9 1K
56K R8
ENVELOPE
T1 BC 212
R10 56K
IC 7
T2 BC 182
C4 0·01
R15 1K
R11 100K
VR 17 100K
d
TO BASS VOICE (800/3)

from 2nd skin osc
R38 150K
R32 100K
IC 1
R31 100K
-5
+5
SNARE ONLY (see fig.1)
VR12 100K
VR16 100K
C12 0·01
R16 6·8K
VR11 100K
R19 470K
VR14 100K
R21 220K
(150K ch2 snare)
R22 220K
VR10 100K
R23 470K
VR13 100K
R24 220K
33K R18
220K

FROM RUN OUT (high tom only)

fig.1
IC 3
11
+5
100K VR12 (resonance)
S.D.S. 800 CH 2 (snare)

2 VCO FREQ
18 VCA GAIN
16 VCF FREQ
3 -VE
1 TIMING
10 N/T BAL
9 NOISE IN
4 TIMING
8 GND
5 FILT.MOD
7 P W
6 WAVE SEL
3394 IC 3
RES 11
20 +5
OP19
17 C11 10µ
15 C10 620p
14 C9 0·022
13 C8 0·022
12 C7 0·022
IC 5
R25 270K
R26 1K
C6 2n
22pF
R27 68K
INDIV OUT
100K MIX OUT VR 18
C5 1n

SIMMONS ELECTRONICS LTD, ST. ALBANS, HERTS.

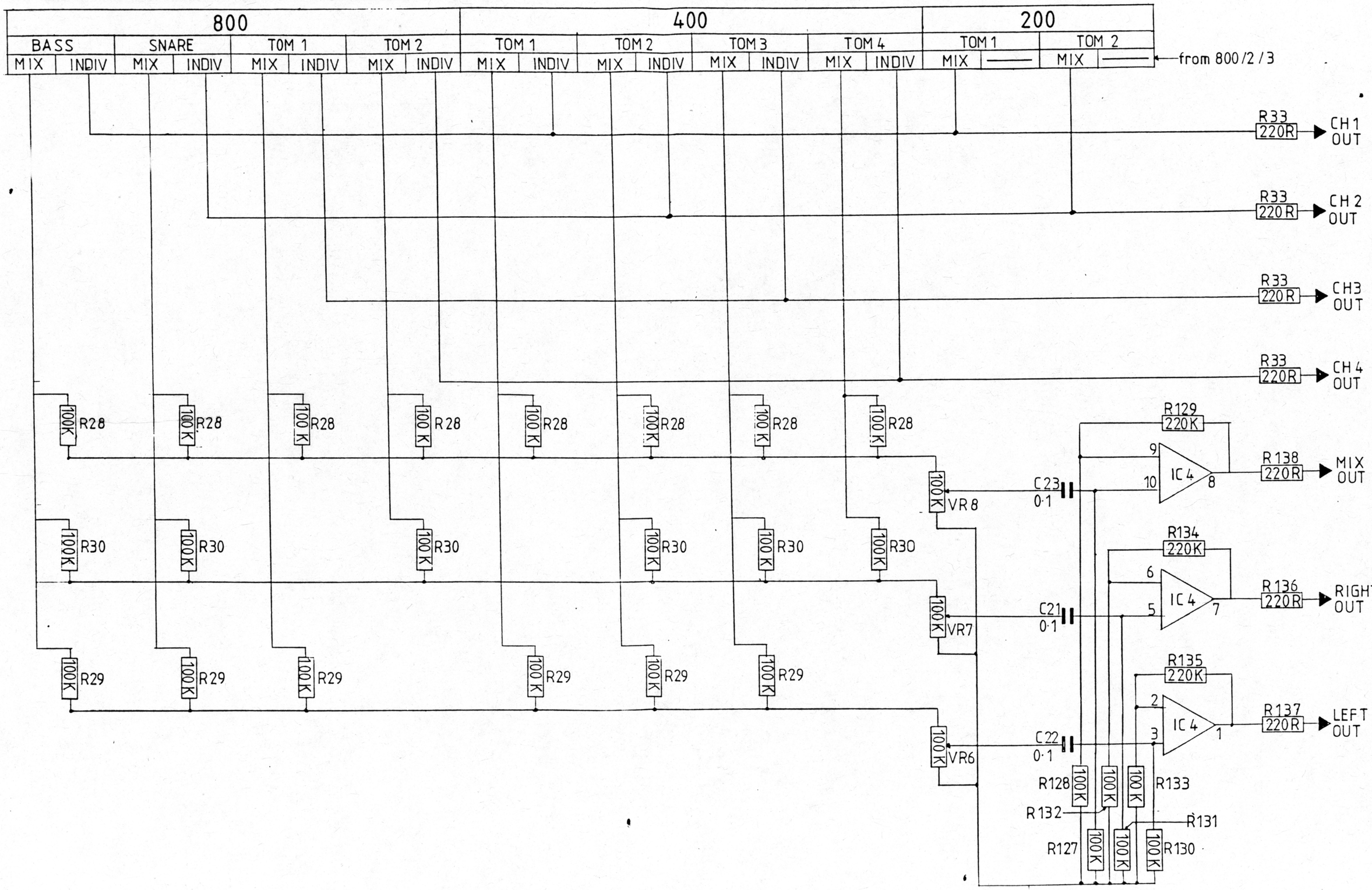
SDS 800 BASS VOICE

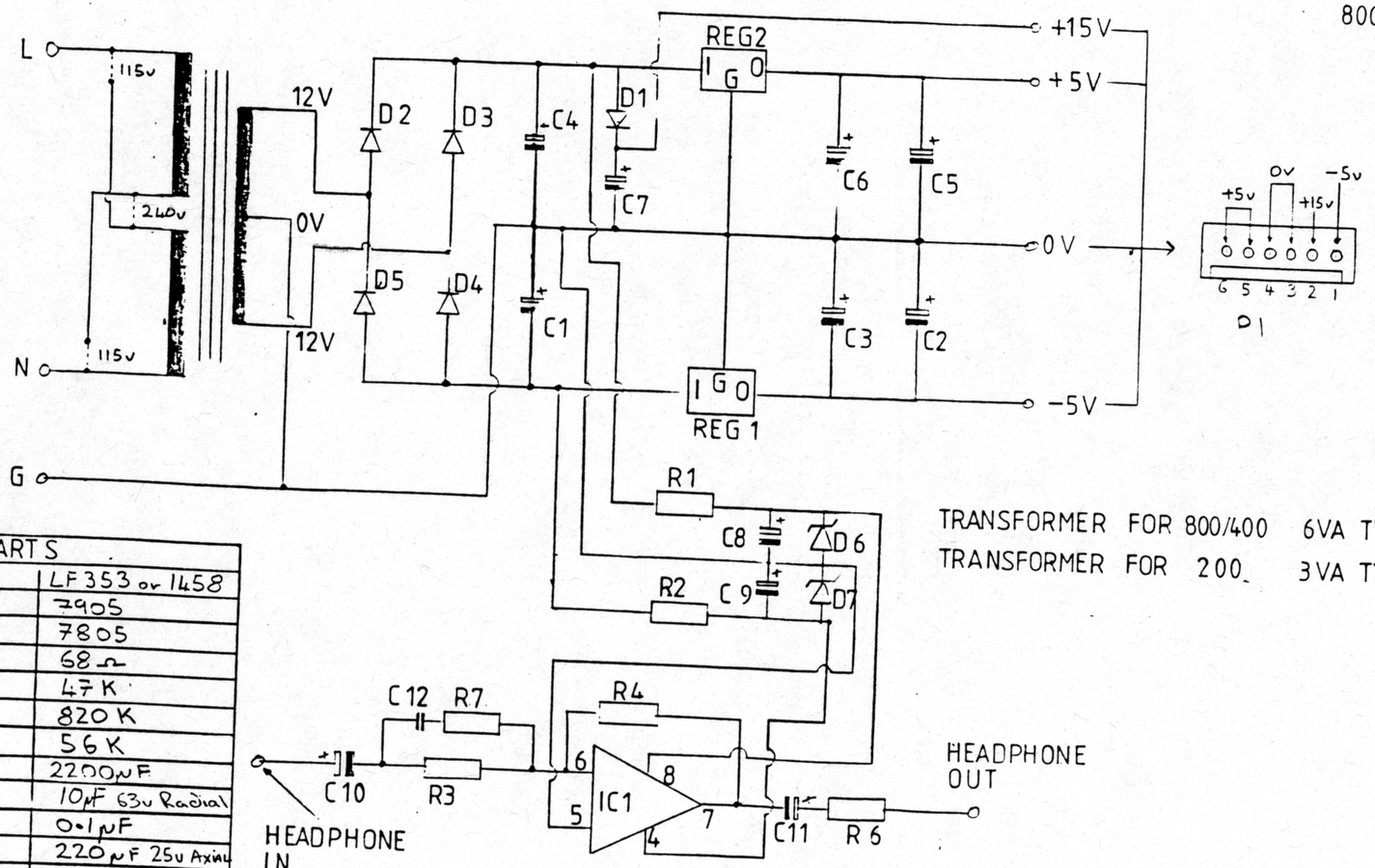
SENSITIVITY, ENVELOPE GENERATOR CCT. SAME AS SNARE AND TOM
a.b.c.d.e. FROM 800/2

a
b
c
d
e
+5
-5
R159 100K
R160 1M5
R148 2K2
R149 1K
IC 11 LS 221
C36 0·1
820K R156
R150 100K
C33 0·01
IC 11 LS221
C37 4n7
22K R155
R151 33K
C34
IC 12 LS 221
C38 4n7
82K R154
R152 33K
C35
IC 12 LS 221
C39 4n7
100K R153
D15
reset osc
click signal
R32 100K
R38 150K
R31 100K
IC1
VR17 100K
VR11 100K
VR14 100K
VR10 100K
VR13 100K
VR12 100K
R19 470K
R21 220K
R22 220K
R23 470K
R24 220K
R25 270K
R18 33K
R26 1K
C6 0·02
2 VCO FREQ
18 VCA GAIN
16 VCF FREQ
3 - VE
1 TIMING
10 N/T BAL
9 NOISE IN
4 TIMING
8 GND
5 FILT MOD
7 P.W
6 WAVE SEL
OP 19
20
17
15
14
13
12
11
C11 10u
C10 620p
C9 0·022
C8 0·022
C7 0·022
22p
150K R27
IC 5
INDIV OUT
VR18 100K
MIX OUT
56K
IC 7
T2 BC 212
C4 0·022
C15 2n2
R105 1K
IC 9
D1
R9 1K
C2 0·47
R106 1K
56K R8
BC 212 T1
R15 1K
VR17 100K
C5 0·022
R162 47K

SIMMONS ELECTRONICS LTD, ST. ALBANS, HERTS.

S.D.S. 800/400/200 OUTPUTS





TRANSFORMER FOR 800/400 6VA TYPE
TRANSFORMER FOR 200_ 3VA TYPE

PARTS	
IC1	LF353 or 1458
REG1	7905
REG2	7805
R1, R2, R6	68Ω
R3	47K
R4	820K
R7	56K
C1, C4	2200NF
C2, C5, C10	10MF 63v Radial
C3, C6	0·1MF
C7, C11	220NF 25v Axial
C8, C9	47NF 16v Radial
C12	2n2
D1, D2, D3, D4, D5	IN4001
D6, D7	12v ZENNER
P1	6way SIL Connector

SDS 800 SERIES PSU

PAD TRIG INPUTS: TOM 1 | TOM 2 | TOM 3 | TOM 4

AUDIO OUTPUTS: TOM 1 | TOM 2 | TOM 3 | TOM 4 | MIX | STEREO

SEQ TRIG IN | FOOT SW

TOM 1 (BASS)

VR 9 — TRIG — OFF / MAX — SENSITIVITY

VR10 — LO / HI — FILTER PITCH

VR 11 — OFF — FILTER SWEEP

VR12 — OFF / (click pitch) / MAX — 2ND SKIN

VR13 — LO / HI — TONE PITCH

VR14 — BEND

VR15 — SHORT / LONG — DECAY

VR16 — NOISE / TONE — BALANCE

VR17 — OFF / MAX — CLICK LEVEL

VR18 — MAX — TOM 1 LEVEL

TOM 2 (SNARE)

VR 9 — TRIG — OFF / MAX — SENSITIVITY

VR10 — LO / HI — FILTER PITCH

VR 11 — OFF — FILTER SWEEP

VR 12 — OFF / MAX — 2ND SKIN (resonance)

VR13 — LO / HI — TONE PITCH

VR14 — BEND

VR15 — SHORT / LONG — DECAY

VR16 — NOISE / TONE — BALANCE

VR17 — OFF / MAX — CLICK LEVEL

VR18 — MAX — TOM 2 LEVEL

TOM 3

VR 9 — TRIG — OFF / MAX — SENSITIVITY

VR10 — LO / HI — FILTER PITCH

VR 11 — OFF — FILTER SWEEP

VR 12 — OFF / MAX — 2ND SKIN

VR13 — LO / HI — TONE PITCH

VR14 — BEND

VR15 — SHORT / LONG — DECAY

VR16 — NOISE / TONE — BALANCE

VR17 — OFF / MAX — CLICK LEVEL

VR18 — MAX — TOM 3 LEVEL

TOM 4

VR 9 — TRIG — OFF / MAX — SENSITIVITY

VR10 — LO / HI — FILTER PITCH

VR 11 — OFF — FILTER SWEEP

VR 12 — OFF / MAX — 2ND SKIN

VR13 — LO / HI — TONE PITCH

VR14 — BEND

VR15 — SHORT / LONG — DECAY

VR16 — NOISE / TONE — BALANCE

VR17 — OFF / MAX — CLICK LEVEL

VR18 — MAX — TOM 4 LEVEL

RUN GENERATOR

VR 1 — OFF / MAX — THRESHOLD

VR 2 — SHORT / LONG — STEP TIME

VR 3 — SHORT / LONG — RUN TIME

VR 4 — RAND / RUN — BALANCE

VR 5 — UP / DOWN

SW 1 — ON/OFF

MASTER VOLUMES

VR 6 — MAX — LEFT LEVEL

VR 7 — MAX — RIGHT LEVEL

VR 8 — MAX — MIX LEVEL

HEADPHONES

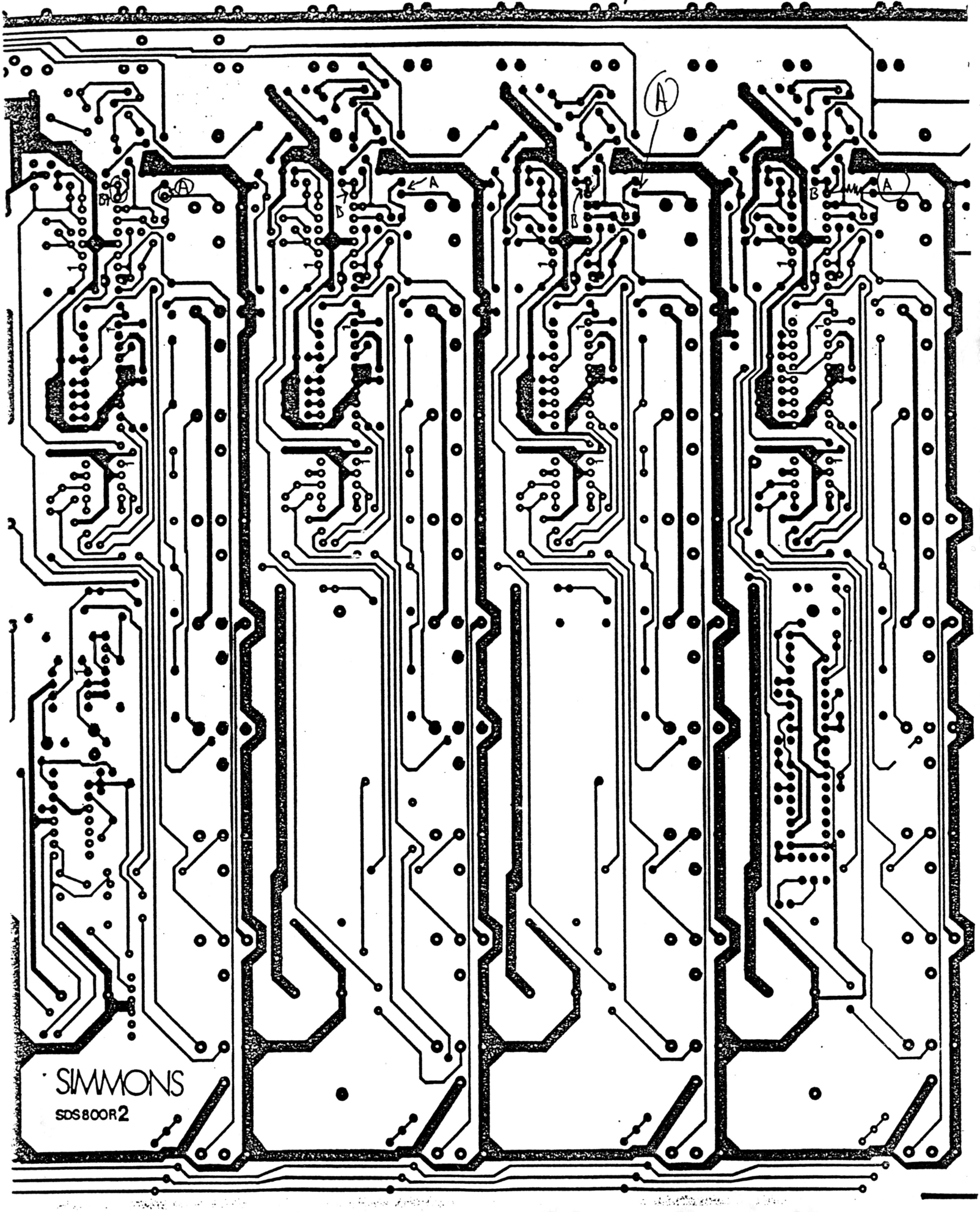
POWER ON

SIMMONS

SDS 400 ELECTRONIC DRUMS

MADE IN ENGLAND
SIMMONS ELECTRONICS LTD
ST ALBANS
ENGLAND

MASTER



SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2

COMPONENT LIST

LABEL					VALUE	TYPE		
R 1	a	b	c	d	150K	0.25w Carbon film 5%	4	
2					——			
3	a	b	c	d	10K	"	4	
4	a	b	c	d	3K9	"	4	
5	a	b	c	d	150K	"	4	
6	a	b	-	-	270K	"	2	
6	-	-	c	d	1M	"	2	
7	a	b	-	-	10K	"	2	
7	-	-	c	d	470K	"	2	
8	a	b	c	d	56K	"	4	
9	a	b	c	d	1K	"	4	
10	a	b	c	d	56K	"	4	
11	a	b	c	d	100K	"	4	
12					——			
13					——			
14	a	b	c	d	470Ω	"	4	
15	a	b	c	d	1K	"	4	
16	-	b	c	d	68K	"	3	
17					——			
18	a	b	c	d	33K	"	4	
19	a	b	c	d	470K	"	4	
20					——			
21	a	b	c	d	220K	"	4	
22	a	-	c	d	220K	"	3	
22	-	b	-	-	150K	"	1	
23	a	b	c	d	470K	"	4	
24	a	b	c	d	220K	"	4	
25	a	b	c	d	270K	"	4	

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2

COMPONENT LIST

LABEL					VALUE	TYPE	
R 26	a	b	c	d	1K	0.25w Carbon film 5%	4
27	a	-	-	-	150K	"	1
27	-	b	c	d	68K	"	3
28	a	b	c	d	100K	"	4
29	a	b	c	-	100K	"	3
30	a	b	-	d	100K	"	3
31	a	b	c	d	100K	"	4
32	a	b	c	d	100K	"	4
33	a	b	c	d	220Ω	"	4
34					—		
35					—		
36	a	b	c	d	150K	"	4
37	a	b	c	d	10K	"	4
38	a	b	c	d	150K	"	4
39	a	b	c	d	220K	"	4
R100	—	—	—	—	100K	"	1
101	—	—	—	—	100K	"	1
102	—	—	—	—	68K	"	1
103	—	—	—	—	68K	"	1
104	—	—	—	—	100K	"	1
105	—	—	—	—	1K	"	1
106	—	—	—	—	1K	"	1
107	—	—	—	—	10K	"	1
108					—		
109	—	—	—	—	1M	"	1
110	—	—	—	—	1K	"	1
111	—	—	—	—	2K2	"	1

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2

COMPONENT LIST

LABEL	VALUE	TYPE	
R112	1K	0.25w Carbon film 5%	1
113	820Ω	"	1
114	10K	"	1
115	10K	"	1
116	10K	"	1
117	820Ω	"	1
118	—		
119	10K	"	1
120	100K	"	1
121	100K	"	1
122	56K	"	1
123	100K	"	1
124	470Ω	"	1
125	10K	"	1
126	56K	"	1
127	100K	"	1
128	100K	"	1
129	220K	"	1
130	100K	"	1
131	100K	"	1
132	100K	"	1
133	100K	"	1
134	220K	"	1
135	220K	"	1
136	220Ω	"	1
137	220Ω	"	1
138	220Ω	"	1
139	100K	"	1

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS.

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2

COMPONENT LIST

4 OF 9

LABEL		VALUE	TYPE		
R140	——	5K6	0.25W Carbon film	1	
141	——	10K	"	1	
142	——	10K	"	1	
143	——	10K	"	1	
144	——	—			
145	——	—			
146	——	—			
147	——	—			
148	——	100K	"	1	
149	——	1K	"	1	
150	——	100K	"	1	
151	——	33K	"	1	
152	——	33K	"	1	
153	——	22K	"	1	
154	——	47K	"	1	
155	——	22K	"	1	
156	——	82K	"	1	
157(A)	——	2K2	"	1	
157(B)	——	68Ω	"	1	
158	a b c d	2M7	"	4	
159	——	100K	"	1	
160	——	1M5	"	1	
161	——	—			
162	——	47K	"	1	

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE N° R2

5 OF 9

COMPONENT LIST

LABEL		VALUE	TYPE		
UR 1	——	100K	Carbon POT 90°LE	1	
2	——	100K	"	1	
3	——	100K	"	1	
4	——	100K	"	1	
5	——	100K	"	1	
6	——	100K	"	1	
7	——	100K	"	1	
8	——	100K	"	1	
9	a b c d	100K	"	4	
10	a b c d	100K	"	4	
11	a b c d	100K	"	4	
12	a b c d	100K	"	4	
13	a b c d	100K	"	4	
14	a b c d	100K	"	4	
15	a b c d	1M	"	4	
16	a b c d	100K	"	4	
17	a b c d	100K	"	4	
18	a b c d	100K	"	4	
RV10	——	2M2	Carbon Pre-Set	1	

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2

COMPONENT LIST

LABEL					VALUE	TYPE		
C1	a	b	c	d	0·022µ		4	
2	a	-	-	-	0·47µ	35v TANT	1	
2	-	b	c	d	0·022µ		3	
3	a	b	c	d	1µ	35v TANT	4	
4	a	b	c	d	0·01µ		4	
5	a	-	-	-	0·022µ		1	
5	-	b	c	d	2n2		3	
6	a	-	-	-	0·022		1	
6	-	b	-	-	4n7		1	
6	-	-	c	d	2n2		2	
7	a	b	c	d	0·022µ		4	
8	a	b	c	d	0·022µ		4	
9	a	b	c	d	0·022µ		4	
10	a	b	c	d	620p		4	
11	a	b	c	d	4·7µ	63v RADIAL ELEC	4	
12	-	b	c	d	0·01µ		3	
13	—	—	—		1µ	63v RADIAL ELEC	1	
14	—	—	—		0·022µ		1	
15	—	—	—		2n2		1	
16	—	—	—		0·022		1	
17	—	—	—		10µ	50v RADIAL ELEC	1	
18	—	—	—		47µ	25v RADIAL ELEC	1	
19	—	—	—		0·1µ		1	
20	—	—	—		0·022µ		1	
21	—	—	—		0·1µ		1	
22	—	—	—		0·1µ		1	
23	—	—	—		0·1µ		1	
24	a	b	c	d	4µ7	63v AXIAL ELEC	4	

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,
HERTS

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2

COMPONENT LIST

LABEL		VALUE	TYPE	
C25	a b c d	4N7	63v AXIAL ELEC	4
26	a b c d	4N7	63v AXIAL ELEC	4
27	a b c d	4N7	63v AXIAL ELEC	4
28	— — —	0·1µ		1
29	— — —	0·1µ		1
30		—		
31	— — —	0·47µ	35v TANT	1
32		—		
33	— — —	0·01µ		1
34	— —	2n2		1
35	— — —	1n		
36		1µ	35v TANT	1
37		4n7		1
38		10n		1
39		22n		1
40		220µ	25v AXIAL ELEC	1
Cmod	a b c d	22pf		4
T 1	a b c d		BC 212	4
2	a b c d		BC 182	4
3	a b c d		BC 182	4
4	a b c d		BC 182	4
5	— — —		ZTX 500	1
6	— — —		BC 212	1
7	— — —		BC 212	1

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,
HERTS

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2

COMPONENT LIST

LABEL					VALUE	TYPE		
D	1	a	b	c	d		IN4148	4	
	2	a	b	c	d		IN4148	4	
	3	a	b	c	d		IN4148	4	
	4	a	b	c	d		IN4148	4	
	5	a	b	c	d		4V7 ZENNER	4	
	6	a	b	c	d		RED LED 3mm HB	4	
	7	a	b	c	d		2V4 ZENNER	4	
	8	a	b	c	d		IN4148		
	9	—	—	—			IN4148	1	
	10	—	—	—			GREEN LED 3mm HB	1	
	11	—	—	—			RED LED 3mm HB	1	
	12	—	—	—			RED LED 3mm HB	1	
	13	—	—	→			4V3 ZENNER	1	
	14	—	—	—			BAT 81	1	
	15	—	—	—			IN4148	1	
IC	1	—	—	—			TL084	1	
	2	—	—	—			74LS221	1	
	3	—	—	—			4013	1	
	4	—	—	—			TL084	1	
	5	a	b	c	d		TL084	4	
	6	a	b	c	d		3394	4	+ 20 PIN SOCKET
	7	a	b	c	d		3080	4	
	8	—	—	—	—		LM301	1	
	9	—	—	—	—		TL084	1	
	10	—	—	—	—		4016	1	
	11	—	—	—	—		74LS221	1	

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,
HERTS

SDS 800 MAIN BOARD

DATE 22-7-85
ISSUE Nº R2
9 OF 9

COMPONENT LIST

LABEL	VALUE	TYPE		
IC12		74 LS 221	1	
SW1		BLUE BUTTON SWITCH	1	
P1		6-WAY SIL POWERCON	1	
SP		LED SPACERS	7	

SIMMONS ELECTRONICS LTD.
UNIT 11 ALBAN PARK,
ST ALBANS,